

Weekly Report

Time: 07/02/2012 – 07/08/2012

Project

This week, Haonan, Xin and I had a short discussion on work we have done in this summer. In general, we had to implement the basic framework of our climate vis system as illustrated in Figure 1. So far, I designed and implemented some basic interfaces according to the architecture that will be used in our system. Furthermore, I also went through all unresolved problems with Binhui. And we will fix these problems in this summer.

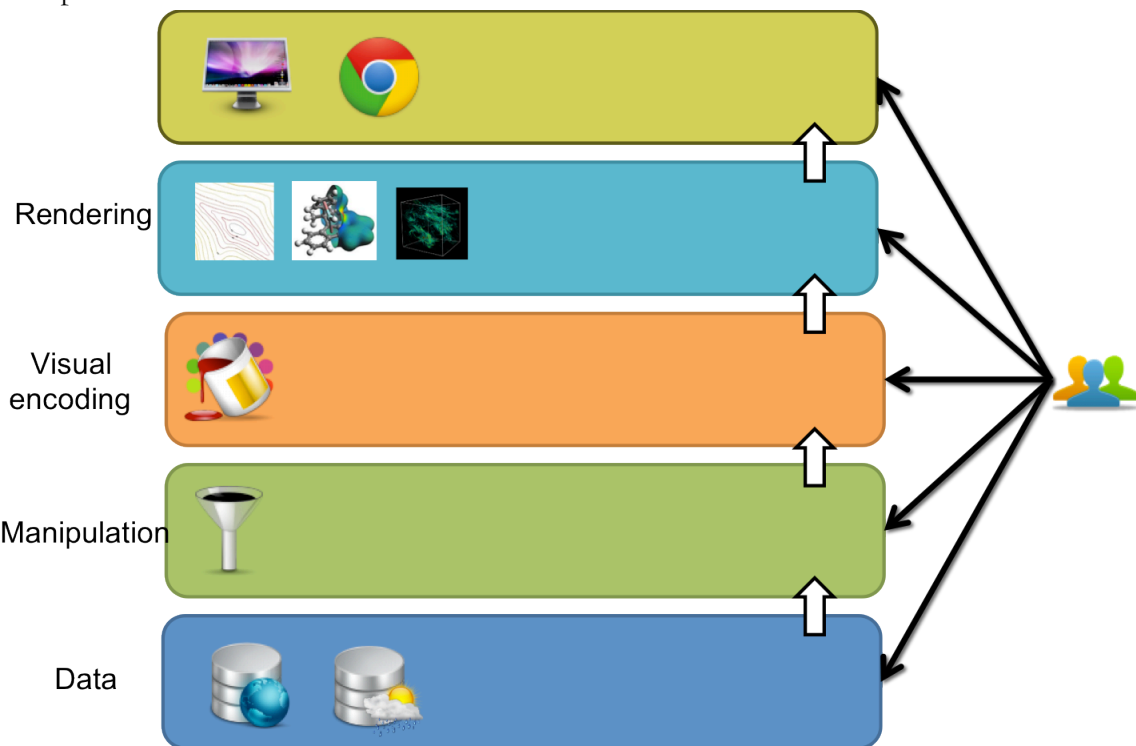


Figure 1 The visualization pipeline of climate data

Research

Fortunately, I got the source code of paper “Improved fast Gaussian Transform” provided by the author. And I incorporated it in my program. However, as the dimension of our dataset goes higher, we have to do more loops to calculate the density probability at each sample point. And most of them are zeros, which means that this is a sparse space. To accelerate this process, we can constraint the calculation within a valid subspace. This is what I have to do in next week. Furthermore, I have to synthesize some datasets to testify my code.

Visualization Book Progress

I have one section left that is the uncertainty visualization part of our visualization book.

Miscellaneous

Work to be done in next week

1. Have a discussion with our climate vis group members to talk about our work in this summer
2. Synthesize some datasets to testify my current uncertain projection code
3. Writing an initial paper draft of my work

Reference: